

```

!           end if
30      end extract
        print
        print "Sorted Data:"
5         print
40      for each tools
        c1$ + change$ (tools(last_inv), '/', '')
        print tools(toolno); tab (23); tools(model); &
        tab (35); tools(last_inv); tab(44); c$
10         if valid ( c1$, "digits" ) = 0 then
            print; tab(53); " Date format is not digits"
            print #2: ;tab(53); " Date format is not digits"
            end if
!           if valid ( c1$, "minlength 6" ) = 0 then
15      !       print; tab(53); " Date format is short"
!           print #2: ;tab(53); " Date format is short"
!           end if

```

Please amend the claims as follows:

20

1. (Original) A method of processing symbolic representations of dates stored in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein according to a format wherein M₁ M₂ is the numerical month designator, D₁ D₂ is the numerical day designator, and Y₁ Y₂ is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time;

selecting a 10-decade window with a Y_A Y_B value for the first decade of the window, Y_A Y_B being no later than the earliest Y₁ Y₂ year designator in the database;

30

determining a century designator $C_1 C_2$ for each symbolic representation of a date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and

reformatting the symbolic representation of the date with the values $C_1 C_2$, Y_1
5 Y_2 , $M_1 M_2$, and $D_1 D_2$ to facilitate further processing of the dates.

2. (Original) The method of claim 1, wherein the 10-decade window includes the decade beginning in the year 2000.

3. (Original) The method of claim 2, wherein the step of determining includes the
10 step of

determining the first value as 20 and the second value as 19.

4. (Original) The method of claim 1, including an additional step, after the step of reformatting, of

sorting the symbolic representations of dates.

15 5. (Original) The method of claim 1, wherein the step of reformatting includes the step of

reformatting each symbolic representation of a date into the format $C_1 C_2 Y_1 Y_2$
 $M_1 M_2 D_1 D_2$.

6. (Original) The method of claim 5, including an additional step, after the step of
20 reformatting, of

sorting the symbolic representations of dates using a numerical-order sort.

7. (Original) The method of claim 1, wherein the step of providing a database includes the step of

converting pre-existing date information having a different format into the format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator and $Y_1 Y_2$ is the numerical year designator.

5 8. (Original) The method of claim 1, wherein the step of selecting includes the step of

selecting $Y_A Y_B$ such that Y_B is 0 (zero).

9. (Original) The method of claim 1, including an additional step, after the step of reformatting, of

10 storing the symbolic representation of dates and their associated information back into the database.

10. (Previously Amended) The method of claim 9, including the additional step, after the step of reformatting, of

manipulating information in the database utilizing the reformatted date information.

15

11. (Original) A method of processing dates in a database, comprising the steps of

20 providing a database with dates stored therein according to a format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator, and $Y_1 Y_2$ is the numerical year designator, all of dates falling within a 10-decade period of time which includes the decade beginning in the year 2000;

selecting a 10-decade window with a $Y_A Y_B$ value for the first decade of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$;

5 reformatting each date in the form $C_1 C_2 Y_1 Y_2 M_1 M_2 D_1 D_2$ to facilitate further processing of the dates; and

sorting the dates in the form $C_1 C_2 Y_1 Y_2 M_1 M_2 D_1 D_2$.

12. (Original) The method of claim 11, wherein the step of providing a database includes the step of

10 converting pre-existing date information having a different format into the format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator and $Y_1 Y_2$ is the numerical year designator.

13. (Original) The method of claim 11, wherein the step of selecting includes the step of

selecting $Y_A Y_B$ such that Y_B is 0 (zero).

15 14. (Original) The method of claim 11, including an additional step, after the step of sorting, of

storing the sorted dates and their associated information back into the database.

15. (Original) The method of claim 14, including the additional step, after the step of sorting, of

20 manipulating information in the database having the reformatted date therein.

16. (Previously added) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

providing a database with symbolic representations of dates stored therein
 according to a format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$
 is the numerical day designator, and $Y_1 Y_2$ is the numerical year designator, all
 of the symbolic representations of dates falling within a 10-decade period of
 5 time;

selecting a window with a $Y_A Y_B$ value for a pivot date of the window, $Y_A Y_B$
 being no later than the earliest $Y_1 Y_2$ year designator in the database;
 determining a century designator $C_1 C_2$ for each symbolic representation of a
 date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and
 10 having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and
 reformatting the symbolic representation of each symbolic representation of a
 date in the database, without the addition of any new data field to the database,
 with the reformatted symbolic representation of each date in the database
 having the values $C_1 C_2$, $Y_1 Y_2$, $M_1 M_2$, and $D_1 D_2$, in order to facilitate
 15 collectively further processing the reformatted symbolic representations of
 each of the symbolic representations of each of the dates.

17. (Previously added) The method of claim 16, wherein the window includes at
 least a portion of the decade beginning in the year 2000.

18. (Previously added) The method of claim 17, wherein the step of determining
 20 includes the step of:

determining the first value as 20 and the second value as 19.

19. (Previously added) The method of claim 16, including an additional step, after
 the step of reformatting, of:

sorting the symbolic representations of dates.

20. (Previously added) The method of claim 16, wherein the step of reformatting includes the step of:

reformatting each symbolic representation of a date into the format $C_1 C_2 Y_1 Y_2$
5 $M_1 M_2 D_1 D_2$ separately from the symbolic representations in the database.

21. (Previously added) The method of claim 20, including an additional step, after the step of reformatting, of:

sorting the symbolic representations of dates using a numerical-order sort.

22. (Previously added) The method of claim 16, wherein the step of providing a
10 database includes the step of:

converting pre-existing date information having a different format into the format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator and $Y_1 Y_2$ is the numerical year designator.

23. (Previously added) The method of claim 16, wherein the step of selecting
15 includes the step of:

selecting $Y_A Y_B$ such that Y_B is 0 (zero).

24. (Previously added) The method of claim 16, including an additional step, after the step of reformatting, of:

storing the symbolic representation of dates and their associated information
20 back into the database.

25. (Previously added) The method of claim 24, including the additional step, after the step of reformatting, of:

manipulating information in the database having the reformatted date
information therein.

26. (Previously added) A method of processing dates in a database, comprising the
steps of:

- 5 providing a database with dates stored therein according to a format wherein
 $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day
 designator, and $Y_1 Y_2$ is the numerical year designator, all of the symbolic
 representations of dates falling within a 10-decade period of time;
 selecting a window with a $Y_A Y_B$ value for a pivot date of the window, $Y_A Y_B$
10 being no later than the earliest $Y_1 Y_2$ year designator in the database;
 determining a century designator $C_1 C_2$ for each date in the database, $C_1 C_2$
 having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if Y_1
 Y_2 is equal to or greater than $Y_A Y_B$;
 reformatting the symbolic representation of each symbolic representation of a
15 date in the database, without the addition of any new data field to the database,
 with the reformatted symbolic representation of each date in the database
 having the values $C_1 C_2$, $Y_1 Y_2$, $M_1 M_2$, and $D_1 D_2$, in order to facilitate
 collectively further processing the reformatted symbolic representations of
 each of the symbolic representations of each of the dates; and
20 sorting the dates in the form $C_1 C_2 Y_1 Y_2 M_1 M_2 D_1 D_2$.

27. (Previously added) The method of claim 26, wherein the step of providing a
database includes the step of:

converting pre-existing date information having a different format into the format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator and $Y_1 Y_2$ is the numerical year designator.

28. (Previously added) The method of claim 26, wherein the step of selecting
5 includes the step of:

selecting $Y_A Y_B$ such that Y_B is 0 (zero).

29. (Previously added) The method of claim 26, including an additional step, after the step of sorting, of:

storing the sorted dates and their associated information back into the database.

10 30. (Previously added) The method of claim 29, including the additional step, after the step of sorting, of:

manipulating information in the database having the reformatted dates therein.

31. (Previously added) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

15 providing a database with symbolic representations of dates stored therein according to a format wherein $Y_1 Y_2$ is the numerical year designator;
selecting a window with a $Y_A Y_B$ value for the first decade of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;
determining a century designator $C_1 C_2$ for each symbolic representation of a
20 date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and

reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values $C_1 C_2, Y_1 Y_2$, in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

32. (Previously added) A method of processing dates in a database, comprising the steps of:

providing a database with symbolic representations of dates stored therein according to a format wherein $Y_1 Y_2$ is the numerical year designator; selecting a window with a $Y_A Y_B$ value for a pivot year of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database; determining a century designator $C_1 C_2$ for each symbolic representation of a date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; reformatting the symbolic representation of each of the dates in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values $C_1 C_2, Y_1 Y_2$, in order to facilitate collectively further processing the reformatted symbolic representations of each of the dates; and sorting the dates in the form $C_1 C_2 Y_1 Y_2$.

33. (Previously added) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

- providing a database with symbolic representations of dates stored therein according to a format wherein $Y_1 Y_2$ is the numerical year designator;
- 5 selecting a window with a $Y_A Y_B$ value for the first decade of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;
- determining a century designator $C_1 C_2$ for each symbolic representation of a date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and
- 10 reformatting the symbolic representation of each symbolic representation of a date in the database, without changing any of the symbolic representations of a date in the database during the reformatting step, with the reformatted symbolic representation of each date in the database having the values $C_1 C_2, Y_1 Y_2$, in order to facilitate collectively further processing the reformatted symbolic
- 15 representations of each of the dates.

34. (Previously added) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising

20 the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic

representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for
5 purposes of such windowing and converting; and,

running a program collectively on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date
10 field of the database.

35. (Previously added) A method of claim 34 further comprising the step of:
opening the database prior to the step of converting.

36. (Previously added) The method of claim 34 further comprising the step of:
15 collectively sorting the converted symbolic representations prior to the step of running the program on the converted symbolic representations.

37. (Previously added) The method of claim 35 further comprising the step of:
collectively sorting the converted symbolic representations prior to the step
20 of running the program on the converted symbolic representations.

38. (Previously added) The method of claim 34 further comprising the step of:

collectively manipulating the converted symbolic representations prior to the step of running the program on the converted symbolic representations.

39. (Previously added) The method of claim 35 further comprising the step of:

5 collectively manipulating the converted symbolic representations prior to the step of running the program on the converted symbolic representations.

40. (Previously added) The method of claim 34 further comprising the step of:

 collectively sorting the converted symbolic representations according to a
10 different data field contained in the database from the at least one date field, prior to the step of running the program on the converted symbolic representations.

41. (Previously added) The method of claim 35 further comprising the step of:

 collectively sorting the converted symbolic representations according to a
15 different data field contained in the database from the at least one date field, prior to the step of running the program on the converted symbolic representations.

42. (Previously added) The method of claim 34 further comprising the step of:

 collectively manipulating the converted symbolic representations according
20 to a different data field contained in the database from the at least one date field, prior to the step of running the program on the converted symbolic representations.

43. (Previously added) The method of claim 35 further comprising the step of:

collectively manipulating the converted symbolic representations according to a different data entry field contained in the database from the at least one date field, prior to the step of running the program on the converted symbolic representations.

5

44. (Previously added) The method of claim 34 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.

10

45. (Previously added) The method of claim 35 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.

15

46. (Previously added) The method of claim 34 wherein the step of converting includes converting at least a substantial portion of each of the plurality of symbolic representations of dates in the at least one date field and repeating this step until each of the date data entries in the at least one date field is converted into the format that does not have the ambiguity.

20

47. (Previously added) The method of claim 35 wherein the step of converting includes converting at least a substantial portion of each of the plurality of symbolic representations of dates in the at least one date field and repeating this

step until each of the date data entries in the at least one date field is converted into the format that does not have the ambiguity.

48. (Previously added) The method of claim 46 further comprising the steps of:

5 collectively sorting the converted symbolic representations prior to the step
of running the program on the converted symbolic representations.

49. (Previously added) The method of claim 47 further comprising the steps of:

 collectively sorting the converted symbolic representations prior to the step
10 of running the program on the converted symbolic representations.

50. (Previously added) The method of claim 46 further comprising the step of:

 collectively manipulating the converted symbolic representations.

15 51. (Previously added) The method of claim 49 further comprising the step of:

 collectively manipulating the converted symbolic representations.

52. (Previously added) The method of claim 46 further comprising the step of:

 collectively sorting the converted symbolic representations according to a
20 different data field in the database than the at least one date field, prior to the step
of running the program.

53. (Previously added) The method of claim 47 further comprising the step of:

collectively sorting the converted symbolic representations according to a different data field in the database than the at least one date field, prior to the step of running the program.

5 54. (Previously added) The method of claim 52 further comprising the step of:
collectively manipulating the converted symbolic.

55. (Previously added) The method of claim 53 further comprising the step of:
collectively manipulating the converted symbolic representations.

10

56. (Previously added) The method of claim 52 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.

15

57. (Previously added) The method of claim 53 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.

20

58. (Previously added) The method of claim 54 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.

59. (Previously added) The method of claim 55 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the
5 date.

60. (Previously added) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that
10 creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic
15 representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and
20 converting;

running a program on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations,

separately from the date data symbolic representations of dates contained in the
at least one date field of the database.

61. (Previously added) A method for representing and utilizing dates stored in at
least one date field of a database utilizing symbolic representations of the dates
5 stored in the at least one date field of the database, which are in a format that
creates ambiguity between dates in each of a pair of adjacent centuries, comprising
the steps of:

converting each of the symbolic representations of dates stored in the at least
one date field of the database to a symbolic representation of each of the
10 respective dates that does not create the ambiguity, by windowing the symbolic
representations of each of the respective dates as stored in the at least one date
field of the database against a pivot year represented by one of the symbolic
representations of the dates as stored in the at least one date field of the
database, without modifying any of the symbolic representations of dates in the
15 at least date field of the database for purposes of such windowing and
converting;

running a program collectively on each of the converted symbolic
representations of each of the respective dates to sort or otherwise manipulate
the dates represented by the converted symbolic representations, separately
20 from the symbolic representations of dates contained in the at least one date
field of the database.

62. (Previously added) A method for representing and utilizing dates stored in at
least one date field of a database utilizing symbolic representations of the dates

stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

- 5 converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for
10 purposes of such windowing and converting;
- storing the converted symbolic representations separate from the at least one date field of the database; and
- running a program on the stored converted symbolic representations to sort or
15 otherwise manipulate data in the database according to the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

63. (Previously added) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates
20 stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date
5 field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for purposes of such windowing and converting;
storing the converted symbolic representations separate from the at least one
10 date field of the database; and
running a program collectively on the stored converted symbolic representations to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

15

64. (Previously added) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising
20 the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic

representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

storing the converted symbolic representations separate from the at least one date field in the database; and

running a program on the stored converted symbolic representations to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

65. (Previously added) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the

database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

5 storing the converted symbolic representations separate from the at least one date field in the database; and

running a program collectively on the stored converted symbolic representations to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

10

66. (Previously added) A method of processing dates in a database, comprising the steps of:

providing a database with dates stored in at least one date field therein according to a format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator, and $Y_1 Y_2$ is the numerical year designator;

15

selecting a window with a $Y_A Y_B$ value for a pivot date of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$;

20

reformatting the symbolic representation of each symbolic representation of a date in a portion of the at least one date field in the database, without the addition of any new data field to the database, with the reformatted symbolic

representation of each date in the database having the values $C_1 C_2$, $Y_1 Y_2$, M_1
 M_2 , and $D_1 D_2$; and

repeating the step of reformatting until each symbolic representation of a date
in the at least one date field has been reformatted in order to facilitate

5 collectively further processing the reformatted symbolic representations of
each of the symbolic representations of each of the dates.

67. (Previously added) A method of processing dates in a database, comprising the
steps of:

providing a database with dates stored in at least one date field therein

10 according to a format wherein $Y_1 Y_2$ is the numerical year designator;

selecting a window with a $Y_A Y_B$ value for a pivot date of the window, $Y_A Y_B$
being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each date in the database, $C_1 C_2$
having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if Y_1

15 Y_2 is equal to or greater than $Y_A Y_B$;

reformatting the symbolic representation of each symbolic representation of a
date in a portion of the at least one date field in the database, without the
addition of any new data field to the database, with the reformatted symbolic
representation of each date in the database having the values $C_1 C_2$, $Y_1 Y_2$; and

20 repeating the step of reformatting until each symbolic representation of a date
in the at least one date field has been reformatted in order to facilitate

collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

68. (Previously added) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

- 5 providing a database with symbolic representations of dates stored in at least one date field therein according to a format wherein $Y_1 Y_2$ is the numerical year designator;
- selecting a window with a $Y_A Y_B$ value for the first decade of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the at least one date
- 10 field of the database;
- determining a century designator $C_1 C_2$ for each symbolic representation of a date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and
- reformatting the symbolic representation of each symbolic representation of a
- 15 date in at least one date field in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values $C_1 C_2, Y_1 Y_2$, in order to facilitate further processing of the reformatted symbolic representations of each of the symbolic representations of each of the dates, by running a program on the reformatted
- 20 symbolic representations of each of the dates.

69. (New) A method of processing dates in a database, comprising the steps of:

providing a database with dates stored in at least one date field therein according to a format wherein $Y_1 Y_2$ is the numerical year designator;

selecting a window with a $Y_A Y_B$ value for a pivot year of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each date in the at least one date field of the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and

5 having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$;

reformatting the symbolic representation of each symbolic representation of a date in the at least one date field in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values $C_1 C_2, Y_1 Y_2$;

10 sorting the reformatted symbolic representations of the dates in the form $C_1 C_2 Y_1 Y_2$; and

running a program on the reformatted symbolic representations of each of the dates.

70. (Previously added) A method for representing and utilizing dates stored in at

15 least one date field of a database utilizing symbolic representations of the dates stored in at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of

converting each of the symbolic representations of dates stored in the at least

20 one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year, with the pivot year being less than or

equal to the earliest date represented by the symbolic representation of dates stored in the at least one date field, without the addition of any new data field to the database, and without modifying any of the symbolic representations of dates in the at least one date field, for purposes of such windowing and

5 converting; and,

running a program on the converted symbolic representations of each of the dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date field of the database.

10 71. (Previously added) A method for representing and utilizing dates stored in at least one date field of the database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of

15 converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year, with the pivot year being less than or
20 equal to the earliest date represented by a symbolic representation of dates stored in the at least one date field, and without the addition of any new data field to the database for purposes of such windowing and converting;

storing each of the converted symbolic representations of each of the dates
separate from the database; and,

running a program on the stored converted symbolic representations of each of
the converted symbolic representations of the dates to sort or otherwise

5 manipulate the dates represented by the converted symbolic representations,
separately from the date data symbolic representations contained in the at least
one date field of the database.

72. (Previously added) A method of processing symbolic representations of dates
stored in a database, comprising the steps of

10 selecting a database with symbolic representations of dates stored therein
according to a format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$
is the numerical day designator, and $Y_1 Y_2$ is the numerical year designator;

selecting a 10-decade window with a $Y_A Y_B$ value for the first decade of the
window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the

15 database;

determining a century designator $C_1 C_2$ for each symbolic representation of a
date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and
having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and,

reformatting the symbolic representation of each symbolic representation of a

20 date in the database with the values $C_1 C_2$, $Y_1 Y_2$, $M_1 M_2$, and $D_1 D_2$ prior to
collectively further processing information contained within the database
associated with the respective dates.

73. (Previously added) A method of processing symbolic representations of dates stored in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein according to a format wherein $Y_1 Y_2$ is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time; selecting a 10-decade window with a $Y_A Y_B$ value for the first decade of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database; determining a century designator $C_1 C_2$ for each symbolic representation of a date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and, reformatting the symbolic representation of the date with the values $C_1 C_2$, $Y_1 Y_2$, to facilitate further processing of the dates.

74. (Previously added) A method of processing dates in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein according to a format wherein $Y_1 Y_2$ is the numerical year designator, all of symbolic representations of dates falling within a 10-decade period of time; selecting a 10-decade window with a $Y_A Y_B$ value for the first decade of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$;

reformatting each date in the form $C_1 C_2 Y_1 Y_2$ to facilitate further processing
5 of the dates; and,

sorting the dates in the form $C_1 C_2 Y_1 Y_2$.

75. (Previously added) A method of processing symbolic representations of dates stored in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein
10 according to a format wherein $M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day designator, and $Y_1 Y_2$ is the numerical year designator;

selecting a window with a $Y_A Y_B$ value for a pivot date of the window, $Y_A Y_B$ being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each symbolic representation of a
15 date in the database, $C_1 C_2$ having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if $Y_1 Y_2$ is equal to or greater than $Y_A Y_B$; and

reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database
20 having the values $C_1 C_2$, $Y_1 Y_2$, $M_1 M_2$, and $D_1 D_2$, in order to facilitate further processing of the reformatted symbolic representations of each of the symbolic representations of each of the dates.

76. (Previously added) A method of processing dates in a database, comprising the steps of

providing a database with dates stored therein according to a format wherein

$M_1 M_2$ is the numerical month designator, $D_1 D_2$ is the numerical day

5 designator, and $Y_1 Y_2$ is the numerical year designator;

selecting a window with a $Y_A Y_B$ value for a pivot date of the window, $Y_A Y_B$

being no later than the earliest $Y_1 Y_2$ year designator in the database;

determining a century designator $C_1 C_2$ for each date in the database, $C_1 C_2$

having a first value if $Y_1 Y_2$ is less than $Y_A Y_B$ and having a second value if Y_1

10 Y_2 is equal to or greater than $Y_A Y_B$;

reformatting the symbolic representation of each symbolic representation of a

date in the database, without the addition of any new data field to the database,

with the reformatted symbolic representation of each date in the database

having the values $C_1 C_2$, $Y_1 Y_2$, $M_1 M_2$, and $D_1 D_2$, in order to facilitate further

15 processing of the reformatted symbolic representations of each of the symbolic representations of each of the dates; and

sorting the dates in the form $C_1 C_2 Y_1 Y_2 M_1 M_2 D_1 D_2$.

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